

EMERGENCY PROCEDURES

1986 Cessna 172P – N9823L
Air Plains 180 HP Conversion
Serial No. 1727401 and subsequent

Engine Failure During Takeoff Roll

1. Throttle.....Idle
2. Brakes.....Apply
3. Flaps.....Retract
4. MixtureIdle Cut Off
5. Ignition Switch.....Off
6. Master Switch.....OFF

Engine Failure Immediately After Takeoff

1. Airspeed
2. **70 KIAS (Flaps Up)**
3. **65 KIAS (Flaps Down)**
4. MixtureIdle Cut Off
5. Fuel Selector.....Off
6. IgnitionOff
7. Wing Flaps.....As Required
8. Master Switch
9. Off

Engine Failure During Flight (Restart)

1. Airspeed 75 KIAS
2. Carb Heat.....On
3. Fuel Selector
4. Mixture Rich
5. Ignition Both
- (or START if propeller is stopped)
6. Primer In & Locked
7. Throttle.....Full Open
8. Mixture Idle Cut Off
9. Cranking.....Continue
10. Fire Extinguisher
11. Obtain
12. Master/Ignition/Fuel
13. Off
14. Fire
15. Extinguish
16. 10. Fire Damage
17. Inspect
18. 11. Vent cabin when assured fire is extinguished

Engine Fire in Flight

1. Mixture Idle Cut Off
2. Fuel Selector.....Off
3. Master Switch.....Off
4. Cabin Heat & Air
5. Off
6. Wing Flaps As Required (30° Recommended)
7. Master Switch
8. Doors.....Unlatched
- Prior To Touchdown
9. Touchdown Slightly Tail Low
- 10.Brakes
- Apply Heavily

Precautionary Landing With Engine Power

1. Seat, Belt, Shoulder.....Secure
2. Wing Flaps
3. Airspeed 20°
4. Select Field.....Perform Fly Over Inspection
5. Radio & Electrical Switches Off
6. Flaps..... 30° on Final Approach
7. Airspeed 65 KIAS
8. Avionics & Master Switches Off
9. Doors.....Unlatched
- Prior To Touchdown
- 10.Touchdown Slightly Tail Low
- 11.Ignition Switch.....Off
- 12.Brakes
- Apply Heavily

Engine Fire During Start

1. Continue Cranking Engine
 2. If Engine Starts.....Power 1700 RPM for a few minutes
 3. Engine....Shutdown and Inspect
- If Engine Fails to Start:
4. Throttle.....Full Open
 5. Mixture
 6. Cranking.....Continue
 7. Fire Extinguisher
 8. Master/Ignition/Fuel
 9. Fire
 10. Obtain
 11. Fire Damage
 12. Inspect

Forced Landing Without Engine Power

1. Seat, Belt, ShoulderSecure
2. Airspeed 70 KIAS (Flaps Up)
3. **65 KIAS (Flaps Down)**

Cabin Fire

1. Master Switch
2. Ignition On)
3. Vents/Cabin Air/Heat . Closed
4. Fire Extinguisher Activate

Warning
After discharging an extinguisher within a closed cabin, ventilate the cabin.

4. Master Switch
- 5. (Except Overhead Vents)
- 6. Airspeed
- 7. 100 KIAS
- (If fire is not extinguished, increase glide speed to find an airspeed, which will provide an incombusible mixture.)

8. Forced Landing w/o Engine Power
9. Execute
10. Ignition On)
11. As soon as possible and inspect damage

Wing Fire

1. Navigation Lights.....Off
2. Strobe Lights
3. Pitot Heat.....Off
4. Landing/Taxi Lights

Note
Sideslip to keep flames away from the fuel tank and cabin, and land as soon as possible using flaps only as required for final approach and touchdown.



Icing

- Pilot Heat.....On
- Turn back or change altitude to obtain an outside air temp that is less conducive to icing.
- Pull cabin heat control to full out and open defroster outlet to obtain maximum windshield defroster airflow.
- Open the throttle to increase engine speed and minimize ice build-up on propeller blades
- Watch for signs of carburetor air filter ice and apply carburetor heat as required. An unexplained loss in engine speed could be caused by carburetor ice or air intake filter ice. Lean the mixture if carb heat is used continuously.
- Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable "off airport" landing site.
- With ice accumulation of $\frac{1}{4}$ inch or more on the wing leading edges, be prepared for significantly higher stall speed.

- Perform landing approach using a forward slip, if necessary, for improved visibility.
- Approach at 80 to 90 KIAS depending upon the amount of accumulation.
- Perform a landing in level attitude.

Ditching

- Radio.....Transmit Mayday on 121.5 giving location and intentions and squawk 7700.
 - Heavy ObjectsSecure or Jettison.
 - Seats, Seat Belts, Shoulder HarnessesSecure
 - Flaps20° to 30°
 - PowerEst. a 300 FPM descent at 55 KIAS.
 - Approach High winds, heavy seas Into the Wind.
 - Light winds, heavy swells Parallel to swells.
- Note
- If no power is available, approach at 70 KIAS with flaps up or at 65 KIAS with 10° flaps.
- Cabin DoorsUnlatch
 - TouchdownLevel attitude at established descent rate.
 - FaceCushion at touchdown with folded coat or seat cushion.
 - AirplaneEvacuate through Cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened.
 - Life vests and raftInflate

Airspeeds for Emergency Operations

- Engine Failure After Takeoff:**
Wing Flaps Up -- 70 KIAS
Wing Flaps Down -- 65 KIAS

Maneuvering Speed:

- 2550 Lbs – 105 KIAS
2150 Lbs – 95 KIAS
1750 Lbs – 85 KIAS

- Maximum Glide:**
2550 Lbs – 68 KIAS
2150 Lbs – 62 KIAS
1750 Lbs – 56 KIAS

- Precautionary Landing With Engine Power – 65 KIAS**

- Landing Without Engine Power:**
Wing Flaps Up – 70 KIAS
Wing Flaps Down – 65 KIAS

This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs.

I certify this checklist has been reviewed for accuracy.

John. A. S. L. / 12/20/05
Wing Director of Maintenance / Date

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